



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,126	07/23/2001	Owen Jones	272PQ-C1	2925
7590 12/23/2005 Larson & Associates, P.C. 221 East Church Street Frederick, MD 21701-5405			EXAMINER MICHALSKI, JUSTIN I	
			ART UNIT 2644	PAPER NUMBER

DATE MAILED: 12/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/911,126	Applicant(s) JONES, OWEN	
	Examiner Justin Michalski	Art Unit 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16-20, 26-29, 31-38, 40-46, 51, 55-63 and 67-92 is/are pending in the application.
 4a) Of the above claim(s) 43-46, 48-51, 55-63 and 67-92 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19, 20, 38, 40 and 41 is/are allowed.
- 6) ☒ Claim(s) 1-12 and 35-37 is/are rejected.
- 7) ☒ Claim(s) 13, 14, 16-18, 26-29, 31-34 and 42 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. This application contains claims 43-46, 48-51, 55-63, and 67-92 drawn to an invention nonelected with traverse in response filed 20 December 2004. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: There are no Figures labeled Figures 4a or 5a as disclosed on pages 19 and 20 of the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Response to Arguments

3. Applicant's arguments, see page 27 and 28, filed 15 September 2005, with respect to Claim 38 have been fully considered and are persuasive. The 102 rejection of claim 38 has been withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Douglas (US Patent Application 2001/0050993) in view of Murata (US Patent 4,922,547).

Regarding Claim 1, Douglas discloses a noise cancellation system (Fig. 4) having compatibility with existing socket configurations (Fig 3, sockets 12 and 13), comprising: an active headset (20'), having at least a first earphone (Fig. 1, earphone 4), a first microphone (paragraph 35), and a first gain control element that provides gain control of the first microphone (paragraph 37); a noise cancellation circuit that is located remotely from the active headset (Fig. 3, unit 30; and a plurality of electrical connections for connecting the noise cancellation circuitry to the active headset (Fig. 4, connections on plug 22'). Douglas does not disclose a current source element coupled in series to the first microphone to provide a correct bias voltage to said first microphone. Murata

Art Unit: 2644

discloses a microphone for a head worn device comprising a current source to supply a bias voltage to a microphone (Col. 4, lines 36-51) along with voltage source 31 and resistor 23 which are in series with microphone unit 27. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a current source to supply a bias voltage to a microphone in order to power the microphone.

Regarding Claim 2, Douglas further discloses the active headset is a stereo headset further comprising a second earphone (3), a second microphone (paragraph 35), and a second gain control element that provides gain control of the second microphone (paragraph 37), and wherein the maximum number of electrical connection is seven (It would have been obvious as a matter of design choice to choose an appropriate maximum number of electrical connections to supply electrical signals to and from a headset).

6. Claim 3-12 are is rejected under 35 U.S.C. 103(a) as being unpatentable over Douglas/Mutata as applied to claim 1 above, and further in view of Mosely (US Patent 5,117,461).

Regarding Claim 3, Douglas/Mutata discloses a system as stated apropos of claim 1 above but do not disclose the active headset is a mono headset. Mosely discloses a noise canceling headset that can be used in mono or binaural sources (Col. 2, lines 48-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have an active headset that can be used in mono.

Art Unit: 2644

It would have been obvious as a matter of design choice to choose an appropriate maximum number of electrical connections to supply electrical signals to and from a headset).

Regarding Claim 4, Douglas/Mutata discloses a system as stated apropos of claim 1 above but do not disclose the active headset is a mono headset or comprising a boom microphone. Mosely discloses a noise canceling headset that can be used in mono or binaural sources (Col. 2, lines 48-50) and comprising a boom microphone for communication (Col. 2, lines 40-43). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have an active headset that can be used in mono and a boom microphone for communication as taught by Mosely. It would have been obvious as a matter of design choice to choose an appropriate maximum number of electrical connections to supply electrical signals to and from a headset).

Regarding Claim 5, Douglas further discloses two stereo jack plugs (14' and 15').

Regarding Claim 6, Douglas further discloses two mono jack plugs (16' and 17').

Regarding Claim 7, Douglas further discloses a stereo jack plug (22').

Regarding Claim 8, Douglas further discloses a stereo jack plug (16') and a mono jack plug (16').

Regarding Claims 9-12, Mosely further discloses pin connectors (Fig. 3c, connector 26, 86, and 88). It would have been obvious to provide an appropriate number of pins as a matter of design choice.

7. Claims 35-37 rejected under 35 U.S.C. 103(a) as being unpatentable over Douglas/Mutata as applied to claim 1 above, and further in view of Maruyama (US Patent 6,377,188).

Regarding Claims 35 and 36, Douglas/Mutata disclose a device as stated apropos of claim 1 above but do not disclose the system in a passenger cabin of a vehicle. Maruyama discloses a headset device integrated in an armrest of an aircraft seat (Col. 2, lines 34-45). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to integrate a headset in a vehicle to allow a passenger to select and listen to audio.

Regarding Claim 37, Douglas further discloses a first and second stereo jack plug (Fig. 4, 14' and 15').

Allowable Subject Matter

8. Claims 19, 20, 38, 40, and 41 are allowed.

9. Claims 13, 14, 16-18, 26-29, 31-34 and 42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (571)272-7524. The examiner can normally be reached on M-F 7-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571)272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JIM


December 19, 2005


HUYEN LE
PRIMARY EXAMINER